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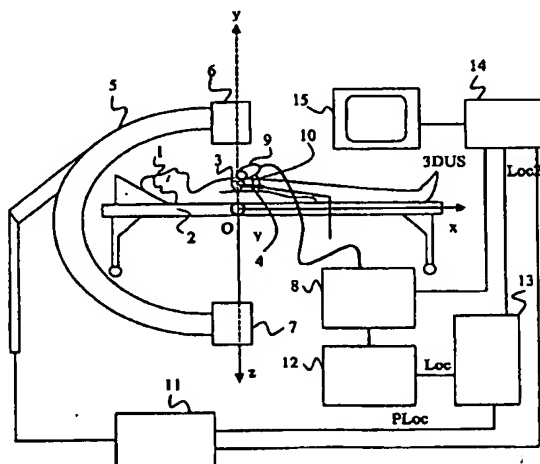
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(54) Title: SYSTEM FOR GUIDING A MEDICAL INSTRUMENT IN A PATIENT BODY



(57) Abstract: The present invention relates to a medical system comprising a medical instrument to be guided in a patient body, means for acquiring a 2D X-ray image of said medical instrument, means for acquiring a 3D ultrasound data set of said medical instrument using an ultrasound probe, means for localizing said ultrasound probe in a referential of said X-ray acquisition means, means for selecting a region of interest around said medical instrument within the 3D ultrasound data set, that define a first localization of said region of interest in a referential of the ultrasound acquisition means, means for converting said first localization into a second localization in said referential of the X-ray acquisition means and means for generating a bimodal representation of said medical instrument detection by combining said 2D X-ray image and the 3D ultrasound data included in said region of interest.